



September 27, 2017

R11379-2.6

Attn: Compliance Tracker, AE-17J  
Air Enforcement and Compliance Assurance Branch  
U.S. Environmental Protection Agency - Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

**Ambient Air Lead Monitoring Report**  
**Sampling Period of August 5 through August 29, 2017**  
**Behr Site - 1100 Seminary Street – Rockford, Illinois 61104**  
**Site ID No.: 201030AYB**

To Whom This May Concern:

**Introduction:**

The Behr Site (Site) has implemented an ambient air monitoring program for lead and arsenic in accordance with USEPA Regions V's Request to Provide Information Pursuant to the Clean Air Act, dated May 5, 2015. An ambient air monitoring station has been installed in accordance with the approved *Ambient Air Lead Monitoring Station Siting Proposal* dated July 7, 2014. The site began operation on September 27, 2015. Station operating procedures, sample collection and handling procedures, and sample analytical methods and procedures have been performed in accordance with the revised *Quality Assurance Project Plan (QAPP)* dated January 31, 2017.

Beginning on September 27, 2015, 24-hour TSP samples were collected every third day, in accordance with USEPA's published ambient air sampling schedule (presented in Appendix A), and analyzed for lead (Pb) and arsenic (As)<sup>1</sup>. Samples are held in sealed envelopes in a controlled area on site until a minimum of eleven samples have been collected. The samples are then sent to RTI International in Research Triangle Park, North Carolina for lead analysis, in accordance with the methods identified in the QAPP. A summary of individual lead measurements reported by RTI for all samples collected during this reporting period is presented in Appendix B.

The Site has also installed a meteorological station to simultaneously record barometric pressure, wind speed, and wind direction during *sample* collection periods. Met data for this reporting period is presented in Appendix C as 1-hour averages.

---

<sup>1</sup> The initial analytical requirements established by USEPA included lead and arsenic; however, as of October 6, 2016, based on previous analytical results, the requirement to analyze for arsenic was eliminated

**Summary of Ambient Air Monitoring Results for This Reporting Period:**

A summary of the ambient air monitor measurements for sampling events performed on August 5 through August 29, 2017, is presented in Table 1 attached to this correspondence.

This table identifies the sampling date, sample duration, the 24-hour average temperature and barometric pressure data recorded by integrated sensors provided with the high volume sampler (used to adjust actual flow rate to standard conditions), average volumetric air sampling rate, total volume of air collected during each sampling event, as well as the analytical results for lead.

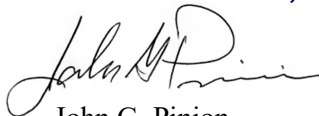
The total mass of lead on the filters (Column J) is divided by the total sample volume at standard conditions (Column H) to identify 24-hour average ambient air lead concentration in Column K.

The monthly mean is reported in Column L. The 3-month mean ambient lead concentration is presented in Column M and is reported as the average of the three most recent monthly means rounded to two significant digits for comparison to rolling 3-month average NAAQS lead standard. The analytical report from RTI International, (subcontracted for filter analyses), is presented in Appendix B.

The attached table also reports the daily average wind direction and daily average wind speed for each sampling day (Columns N and O respectively). The meteorological data for this reporting period is presented in Appendix C, which also includes an aerial photo of the facility identifying the location of the ambient air monitor with respect to the lead material processing building (Dock 25) and the three point sources of lead emissions.

The Site has retained RK & Associates to assist with submitting monthly lead monitoring reports. If you have any questions, or require any additional information please do not hesitate to contact John Pinion at 630-393-9000 ([jpinion@rka-inc.com](mailto:jpinion@rka-inc.com)).

Yours very truly,  
**RK & Associates, Inc.**



John G. Pinion  
Associate Engineer

cc: Ms. Sarah Schlichtholz – Director, Environmental and Community Affairs – Alter Treading Inc. – St. Louis, MO  
Mr. Patrick Kohlmeier – Environmental Engineer – Behr Site – Rockford, IL  
Mr. Eric Boyd – Thompson Colburn – Chicago, IL

**Table 1. Summary of Ambient Air Lead Monitoring Results August 5 through August 29, 2017**  
**The Behr Site - Rockford, Illinois**

Wind direction data includes  
adjustment from Oct. 2016  
Met Sta Performance Audit

Col -> A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
USEPA Lead Sample Day (Y)	Day of Week	Sample Collection Date	Sample Duration (days) (hrs)	Avg. Temp °C	Avg. Bar. Pres. mmHg	Sample Rate / Volume		Sampler Data Flags	Lead <sup>a</sup> ug/filter	Ambient Lead Concentration <sup>c</sup>			Facility Met Data		
						Average Rate scfm	Total std m <sup>3</sup>			Daily Average ug/m <sup>3</sup>	Monthly Average ug/m <sup>3</sup>	3-Month Rolling Average <sup>b</sup> ug/m <sup>3</sup>	Daily Avg Wind Direction Degrees	Daily Avg Wind Speed mph	
	Sat	06/03/17	24:00	27.20	739.00	42.20	1,720.62		73.58	0.042	0.087	0.10		140°	1.29
Y	Tue	06/06/17	24:00	22.70	742.00	42.80	1,745.34		204.14	0.116				50°	0.56
	Fri	06/09/17	24:00	27.20	735.00	42.40	1,729.62		190.26	0.109				260°	0.64
Y	Mon	06/12/17	24:00	29.60	738.00	42.00	1,711.92		691.00	0.403				130°	2.03
	Thu	06/15/17	24:00	27.60	736.00	42.00	1,713.79		44.20	0.025				248°	0.44
Y	Sun	06/18/17	24:00	23.40	733.00	42.30	1,723.28		16.10	0.009				286°	2.81
	Wed	06/21/17	24:00	26.40	737.00	42.20	1,719.03		132.00	0.076				139°	1.97
Y	Sat	06/24/17	24:00	20.00	741.00	43.10	1,759.07		24.80	0.014				292°	3.05
	Tue	06/27/17	24:00	23.70	741.00	42.80	1,746.95		27.70	0.015				204°	0.42
Y	Fri	06/30/17	24:00	25.90	737.00	42.40	1,727.64		103.00	0.059				277°	1.01
	Mon	07/03/17	24:00	25.00	742.00	42.80	1,746.89		54.24	0.031	0.026	0.05		127°	2.31
Y	Thu	07/06/17	24:00	30.60	739.00	41.90	1,710.14		15.62	0.009				271°	0.41
	Sun	07/09/17	24:00	27.20	738.00	42.60	1,736.02		30.34	0.017				138°	2.16
Y	Wed	07/12/17	24:00	27.00	738.00	42.40	1,729.08		31.12	0.017				142°	1.66
	Sat	07/15/17	24:00	26.50	742.00	42.60	1,736.56		24.08	0.013				241°	0.30
Y	Tue	07/18/17	24:00	28.40	742.00	42.50	1,733.27		29.22	0.016				143°	1.31
	Fri	07/21/17	24:00	26.20	737.00	42.40	1,730.02		106.34	0.061				135°	1.58
Y	Mon	07/24/17	24:00	23.70	742.00	42.80	1,746.72		88.50	0.050				95°	1.27
	Thu	07/27/17	24:00	25.90	739.00	42.50	1,732.88		56.04	0.032				22°	1.19
Y	Sun	07/30/17	24:00	26.40	746.00	43.10	1,759.13		24.82	0.014				288°	0.60
	Wed	08/02/17	24:00	27.20	741.00	42.70	1,739.99		68.69	0.039	0.030	0.05		257°	1.48
Y	Sat	08/05/17	24:00	25.10	741.00	42.90	1,747.80		17.06	0.010				271°	0.50
	Tue	08/08/17	24:00	25.30	745.00	42.80	1,745.14		19.53	0.011				284°	1.19
Y	Fri	08/11/17	24:00	22.20	741.00	43.00	1,753.21		47.97	0.027				314°	1.54
	Mon	08/14/17								q				149°	0.95
Y	Thu	08/17/17	24:00	26.40	734.00	18.90	769.54		40.51	0.053 r				205°	0.66
	Sun	08/20/17	24:00	27.10	741.00	0.00				s				139°	0.96
Y	Wed	08/23/17	24:00	22.50	742.00	42.80	1,743.72		19.65	0.011				307°	1.55
	Sat	08/26/17	24:00	22.40	745.00	42.90	1,750.58		102.51	0.059				130°	2.52
Y	Tue	08/29/17	24:00	23.60	742.00	42.80	1,747.18		47.49	0.027				10°	0.33

Period Covered by this Report

- a. Lab analysis by RTI International in Research Triangle Park, NC.
- b. Arithmetic average of all sampling events during the previous three calendar months.
- c. The requirement to analyze for, and report, ambient air arsenic concentrations was eliminated by USEPA as of September 27, 2016.
- p. The filter from the March 23, 2017, sampling event was inadvertently left on the sampler for the March 26, 2017, sampling event resulting in 48-hours of sampling time on a single filter. The corresponding ambient air Pb concentration for this filter was calculated using the total combined volume of air sampled on March 23rd and March 26th. The resulting single ambient air Pb concentration was reported as the daily average for both March 23 and March 26, 2017.
- q. The monitoring station did not operate because of a programming error. The filter was submitted for analysis as a field blank. A notation has been added to the laboratory report to identify this sample as a field blank.
- r. Brushes on sample motor failed during the sampling period resulting in a total sample volume of approximately 40% of normal.
- s. After repair and re-installation of the electric motor, the sample line was pinched off preventing flow to the filter. Because there was no flow the filter was not sent for analysis. A notation has been added to the lab report to identify the missing sample.





**Ambient Air Lead Monitoring Report  
Behr Site**

**1100 SEMINARY STREET  
ROCKFORD, ILLINOIS  
SITE ID NO.: 201030AYB**

**Report Date: September 27, 2017**

**APPENDIX A**

**USEPA Schedule of Lead Sampling Days for 2017**



# EPA Sampling Schedule

2017

## Important Dates

## Notes

3-Day schedule is shown in orange, green, and purple

6-Day schedule is shown in green and purple

12-Day schedule is shown in purple

### January

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

### February

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

### March

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

### April

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

### May

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

### June

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

### July

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

### August

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

### September

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

### October

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

### November

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

### December

S	M	T	W	T	F	S
						1
2						
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						







**Ambient Air Lead Monitoring Report  
Behr Site**

**1100 SEMINARY STREET  
ROCKFORD, ILLINOIS  
SITE ID NO.: 201030AYB**

**Report Date: September 27, 2017**

**APPENDIX B**

**RTI International Analytical Results  
August 5 through August 29, 2017**



September 25, 2017

Andrew Setter  
Behr Iron & Metal  
1100 Seminary Street  
Rockford, IL 61104

Dear Mr. Setter:

RTI International analyzed the TSP filter samples you provided in accordance with 40 CFR Part 50, Appendix G. The results are summarized below in Table 1.

Table 1. TSP Filter Results µg/Filter		
Filter ID	Date Collected	Lead
9446466	8/29/2017	47.5
9446467	8/26/2017	103
9446468	8/23/2017	19.6
9446471	8/17/2017	40.5
9446472	8/14/2017	31.3
9446473	8/11/2017	48.0
9446474	8/8/2017	19.5
9446475	8/5/2017	17.1

**Note added by Behr for clarification of results.**

The monitoring station did not operate on 8/14/17 due to a programming error in the operating schedule. The filter was submitted for analysis as a field blank.

There was no sample air flow through the filter on 8/20/17 because the sample tube was pinched off. The filter from this date was not submitted for analysis.

Please refer to the attached spreadsheets “Behr Set 21 Data” and “2017 Pb TSP Audit Filters Q3” for quality control information. The remaining filter sections will be archived for two years. Please call me at 919-541-8762 or email me at [fxw@rti.org](mailto:fxw@rti.org) if you have any questions.

Sincerely,

*Frank Weber*

Frank Weber  
Laboratory Manager

cc: Project file 0281702.032  
Lisa Bailey, RTI/ORC



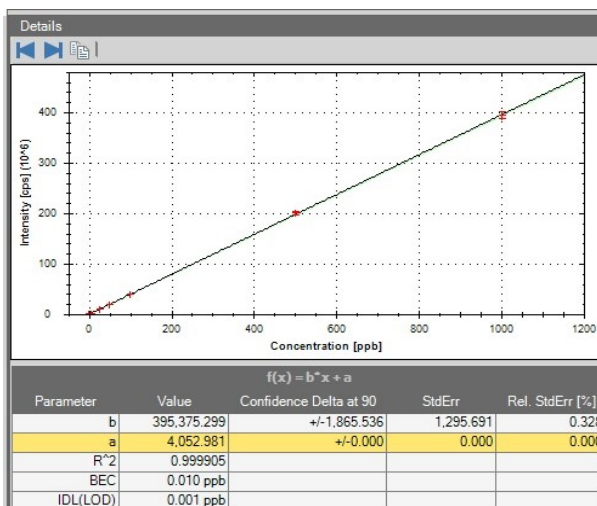
**0215163.019.001 Set 21**

**Calibration Standards**

	Lead $\mu\text{g/L}$	% Recovery
Calibration Blank	0.699	n/a
5	5.11	102
25	24.6	98
50	49.1	98
100	97	97
500	500	100
1000	1000	100

**Initial and Continuing Calibration Verifications**

	Lead $\mu\text{g/L}$	% Recovery
ICV	198	99
CCV1	199	99
CCV2	196	98
CCV3	199	100



**Initial and Continuing Calibration Blanks**

	Lead $\mu\text{g/L}$		
ICB	0.337	<RL	RL=5 $\mu\text{g/L}$
CCB1	0.350	<RL	
CCB2	0.333	<RL	
CCB3	0.495	<RL	

**Lower Level Calibration Verifications**

	Lead $\mu\text{g/L}$	% Recovery
LLCV1	11.3	94
LLCV2	11.7	97

**Reagent Blanks/Reagent Blank Spikes**

	Lead $\mu\text{g/L}$	% Recovery
RB	0.321	<RL
RBS	236	94

**Certified Reference Material**

	Lead $\mu\text{g/L}$	Lead mg/kg	% Recovery	weight (g)	NIST 2711 Montana Soil Certified Value = 1162mg/kg
CRM 2710	2646.690033	1039	89	0.1019	
Filter Blank	3.50				

**Matrix Duplicates**

	Lead $\mu\text{g/filter}$	RPD
9446467	103	
9446467 Duplicate	98.4	4

**Matrix Spikes**

	Lead $\mu\text{g/filter}$	% Recovery
9446467	103	
9446467 Spike	205	86

**Serial Dilutions**

	Lead $\mu\text{g/filter}$	% Difference
9446466	47	
9446466 1:5	51	7

**MDL**      Lead  $\mu\text{g/filter}$   
 0.0832

				TSP strips		
	Date	µg/L	final vol (L)	µg/strip	% Recovery	Actual
BAT-TSP-2017-01-355	7/11/2017	360	0.040	14.42	94	15.4
BAT-TSP-2017-02-318	7/11/2017	1483	0.040	59.31	89	66.7
BAT-TSP-2017-01-354	8/14/2017	384	0.040	15.38	100	15.4
BAT-TSP-2017-02-321	8/14/2017	1615	0.040	64.60	97	66.7
BAT-TSP-2017-01-356	9/7/2017	371	0.040	14.83	96	15.4
BAT-TSP-2017-02-322	9/7/2017	1587	0.040	63.48	95	66.7



**Ambient Air Lead Monitoring Report  
Behr Site**

**1100 SEMINARY STREET  
ROCKFORD, ILLINOIS  
SITE ID NO.: 201030AYB**

**Report Date: September 27, 2017**

**APPENDIX C**

**Meteorological Station Data – Hourly Averages  
August 5 through August 29, 2017**







**Ambient Monitor Location with Respect to Site Emission Points and Site Boundaries**



**Summary of Hourly Meteorological Data for Ambient Sampling**  
**Ambient Air Sampling Days - August 5 through August 29, 2017**  
**Behr Iron & Metal an Alter Company - Rockford, Illinois**

Date	Hour	Average Barometric Pressure mmHg	Average Temp °F	Hourly Average Wind Speed mph	Hourly Average Wind Direction Deg	Average Daily Wind Direction Deg	Average Daily Wind Speed mph
08/08/17	1	766	61.0	0.73	271°	284°	1.19
	2	766	60.0	0.75	262°		
	3	766	59.3	0.78	268°		
	4	766	58.6	0.40	247°		
	5	767	58.3	0.26	233°		
	6	767	57.7	0.21	261°		
	7	767	58.5	0.17	251°		
	8	767	62.2	0.53	282°		
	9	767	68.9	0.97	290°		
	10	768	74.9	1.27	303°		
	11	768	76.9	2.09	283°		
	12	767	79.6	1.63	313°		
	13	767	81.5	1.76	293°		
	14	767	81.8	2.04	289°		
	15	767	82.2	2.35	284°		
	16	767	82.1	2.52	287°		
	17	766	82.1	2.88	289°		
	18	766	81.5	2.62	285°		
	19	766	80.7	2.62	283°		
	20	766	77.5	1.61	281°		
	21	766	73.1	0.40	266°		
	22	766	69.2	0.24	235°		
	23	766	67.6	0.30	242°		
	24	767	66.0	0.36	245°		
08/11/17	1	762	66.9	1.38	284°	314°	1.54
	2	762	66.1	1.72	285°		
	3	762	66.2	0.36	277°		
	4	762	65.6	1.04	282°		
	5	762	65.1	1.42	287°		
	6	762	64.5	1.20	295°		
	7	762	63.6	1.61	300°		
	8	762	63.8	1.48	299°		
	9	763	65.7	1.87	322°		
	10	763	67.3	2.18	325°		
	11	763	70.4	1.91	320°		
	12	763	71.2	2.07	319°		
	13	763	72.0	2.54	323°		
	14	763	72.6	1.86	330°		
	15	763	73.1	2.30	319°		
	16	763	74.6	2.32	321°		
	17	763	74.2	2.26	326°		
	18	763	75.1	2.24	330°		
	19	763	74.1	2.34	337°		
	20	763	70.9	1.67	328°		
	21	763	68.0	1.06	299°		
	22	763	66.0	0.58	299°		
	23	763	64.8	0.66	314°		
	24	763	63.4	0.54	304°		

**Summary of Hourly Meteorological Data for Ambient Sampling**  
**Ambient Air Sampling Days - August 5 through August 29, 2017**  
**Behr Iron & Metal an Alter Company - Rockford, Illinois**

Date	Hour	Average Barometric Pressure mmHg	Average Temp °F	Hourly Average Wind Speed mph	Hourly Average Wind Direction Deg	Average Daily Wind Direction Deg	Average Daily Wind Speed mph
08/14/17	1	762	67.9	1.14	131°	149°	0.95
	2	761	67.4	0.79	128°		
	3	761	66.5	1.47	139°		
	4	761	65.8	1.15	144°		
	5	761	64.5	0.59	142°		
	6	761	62.5	0.40	136°		
	7	761	61.6	0.18	229°		
	8	760	64.6	1.73	128°		
	9	760	69.0	1.80	140°		
	10	760	70.8	0.58	217°		
	11	760	71.3	2.22	141°		
	12	759	72.4	2.37	133°		
	13	759	76.2	2.21	142°		
	14	759	77.9	3.31	137°		
	15	758	79.2	3.04	134°		
	16	758	81.4	0.94	162°		
	17	758	81.5	1.55	142°		
	18	758	80.4	0.41	225°		
	19	758	78.9	0.40	235°		
	20	758	77.6	0.73	269°		
	21	758	75.9	0.63	258°		
	22	758	74.5	0.83	257°		
	23	758	72.6	0.67	268°		
	24	758	70.5	0.94	281°		
08/17/17	1	757	76.0	3.11	145°	205°	0.66
	2	757	75.5	3.31	139°		
	3	756	73.9	2.81	142°		
	4	756	72.1	2.72	140°		
	5	756	71.8	2.93	138°		
	6	756	71.4	2.32	136°		
	7	756	70.7	2.40	144°		
	8	756	71.3	3.10	137°		
	9	756	72.1	3.68	122°		
	10	756	74.3	4.34	124°		
	11	756	76.2	3.03	124°		
	12	756	75.2	0.63	63°		
	13	756	76.6	3.96	286°		
	14	756	77.1	1.37	308°		
	15	755	79.7	1.07	93°		
	16	755	80.8	3.10	289°		
	17	755	80.1	3.84	285°		
	18	755	78.5	4.67	285°		
	19	756	77.2	2.64	289°		
	20	756	75.2	3.92	284°		
	21	757	71.8	3.45	282°		
	22	757	72.0	2.43	277°		
	23	757	71.2	1.38	288°		
	24	757	70.5	2.55	280°		

**Summary of Hourly Meteorological Data for Ambient Sampling**  
**Ambient Air Sampling Days - August 5 through August 29, 2017**  
**Behr Iron & Metal an Alter Company - Rockford, Illinois**

Date	Hour	Average Barometric Pressure mmHg	Average Temp °F	Hourly Average Wind Speed mph	Hourly Average Wind Direction Deg	Average Daily Wind Direction Deg	Average Daily Wind Speed mph
08/20/17	1	762	66.5	0.80	265°	139°	0.96
	2	762	66.1	0.37	146°		
	3	762	65.5	0.71	152°		
	4	762	65.0	0.68	149°		
	5	762	64.1	0.57	154°		
	6	763	63.8	0.88	147°		
	7	763	64.4	0.95	139°		
	8	762	66.5	1.51	140°		
	9	763	70.1	1.84	138°		
	10	763	73.9	2.30	140°		
	11	763	77.1	2.51	142°		
	12	763	81.3	2.27	132°		
	13	763	82.3	0.86	248°		
	14	763	82.0	0.89	302°		
	15	763	82.8	0.80	327°		
	16	762	83.2	1.74	123°		
	17	762	80.1	2.56	127°		
	18	762	79.1	2.70	129°		
	19	762	78.3	2.07	128°		
	20	763	77.0	1.63	127°		
	21	763	77.7	0.84	128°		
	22	763	77.4	0.11	187°		
	23	763	74.5	0.24	312°		
	24	763	74.2	0.21	253°		
08/23/17	1	763	62.3	1.68	296°	307°	1.55
	2	763	61.5	1.78	304°		
	3	763	60.1	1.34	309°		
	4	763	58.7	1.29	305°		
	5	763	58.1	1.49	306°		
	6	763	57.7	1.52	294°		
	7	764	57.5	1.56	309°		
	8	764	58.7	1.33	302°		
	9	764	62.6	1.16	316°		
	10	764	68.0	1.31	317°		
	11	764	71.3	1.69	305°		
	12	764	73.5	2.19	311°		
	13	764	75.3	2.40	319°		
	14	764	75.5	2.40	317°		
	15	763	76.5	2.47	316°		
	16	763	76.8	2.12	318°		
	17	763	77.1	2.47	302°		
	18	763	76.5	2.03	307°		
	19	763	76.1	1.78	328°		
	20	763	72.2	1.01	323°		
	21	763	68.1	0.98	271°		
	22	763	65.2	0.87	269°		
	23	763	63.2	0.70	276°		
	24	763	62.3	0.72	281°		



**Summary of Hourly Meteorological Data for Ambient Sampling**  
**Ambient Air Sampling Days - August 5 through August 29, 2017**  
**Behr Iron & Metal an Alter Company - Rockford, Illinois**

Date	Hour	Average Barometric Pressure mmHg	Average Temp °F	Hourly Average Wind Speed mph	Hourly Average Wind Direction Deg	Average Daily Wind Direction Deg	Average Daily Wind Speed mph
08/26/17	1	769	62.4	3.41	123°	130°	2.52
	2	769	61.5	2.62	122°		
	3	769	60.7	1.64	126°		
	4	769	59.8	1.50	130°		
	5	769	60.1	1.63	140°		
	6	769	60.7	1.82	139°		
	7	769	60.3	1.64	136°		
	8	769	60.8	0.67	145°		
	9	769	63.2	1.90	131°		
	10	769	67.4	3.01	137°		
	11	769	70.4	3.69	129°		
	12	769	72.4	3.83	133°		
	13	768	73.2	3.44	135°		
	14	768	73.0	2.61	139°		
	15	768	72.7	3.01	129°		
	16	767	72.3	3.46	125°		
	17	767	71.7	3.26	128°		
	18	767	71.3	2.69	124°		
	19	767	71.2	2.61	125°		
	20	767	70.3	2.84	125°		
	21	766	68.9	2.88	125°		
	22	767	68.0	1.93	128°		
	23	767	66.8	2.27	134°		
	24	766	66.6	2.45	131°		
08/29/17	1	763	62.4	0.39	333°	10°	0.33
	2	763	61.7	0.27	72°		
	3	763	60.6	0.10	278°		
	4	763	59.7	0.52	330°		
	5	763	59.0	0.31	336°		
	6	764	58.1	0.84	331°		
	7	764	58.7	0.62	330°		
	8	764	60.5	0.67	335°		
	9	764	63.2	0.32	329°		
	10	764	68.6	1.13	338°		
	11	764	71.9	1.25	329°		
	12	764	75.4	1.19	355°		
	13	764	77.5	1.47	340°		
	14	764	78.2	1.31	342°		
	15	764	78.9	1.02	1°		
	16	763	77.5	1.40	113°		
	17	763	77.3	0.92	358°		
	18	763	78.2	0.63	346°		
	19	763	74.9	0.46	110°		
	20	763	72.8	2.42	128°		
	21	764	71.1	1.67	126°		
	22	764	68.8	1.36	134°		
	23	764	66.2	0.21	280°		
	24	764	65.1	0.55	269°		